

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Matthias MOERZ
Application No.: NEW APPLICATION
Filed: February 24, 2004
For: ANALOG DECODING METHOD AND DECODER

INFORMATION DISCLOSURE STATEMENT
(SUBMISSION CONCURRENT WITH THE
FILING OF A NEW PATENT APPLICATION)

Box New Patent Application

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

February 24, 2004

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98, applicant(s) hereby submit(s) an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS OR OTHER INFORMATION

The patents, publications, or other information submitted for consideration by the Office are listed on PTO-1449, attached hereto.

II. COPIES

- ☒ Submitted herewith is a legible copy of (i) each U.S. and foreign patent; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed.
- ☐ Because the present application was/is being filed after June 30, 2003, no copies of the U.S. patents or U.S. patent application publications which are listed on the attached Form 1449 are enclosed pursuant to the waiver of 37 C.F.R. § 1.98(a)(2)(i). Any foreign patent documents or non-patent literature listed on the attached Form 1449 are enclosed herewith.
- ☐ This application is a National Phase of a PCT application. Some or all of the documents listed on the PTO-1449 are not enclosed because they were cited in the International Search Report and copies should be forwarded from the International Search Authority. If copies are needed, please contact the undersigned.

III. CONCISE EXPLANATION OF THE RELEVANCE
(check at least one box)

a. ☒ **DOCUMENTS IN THE ENGLISH LANGUAGE**

The attached patents, publications, or other information in the English language do not require a statement of relevancy.

b. ☐ **DOCUMENTS NOT IN THE ENGLISH LANGUAGE**

A concise explanation of the relevance of all patents, publications, or other information listed that is not in the English language is as follows:

c. ☐ **OTHER**

For the Examiner's convenience, we attach hereto U.S. Patent No. _____, which is the corresponding U.S. equivalent of _____. Submission of the English language equivalent(s) is deemed to satisfy the requirement for a concise explanation of relevancy.

FEES

This Information Disclosure Statement is being filed concurrently with the filing of a new patent application; therefore, no fee is required.

If The Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule and charge the appropriate fee to Deposit Account No. 08-0750.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNESS, DICKEY & PIERCE, P.L.C

By: _____


Gary D. Yacura, Reg. No. 35,416

GDY/HRH:ewd

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

Enclosures: ☒ Form PTO-1449(s)
☒ Documents
☐ Fee

<p>FORM HDP-1449 (Based on Form-PTO-1449)</p> <p>PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION (Use several sheets if necessary)</p> <p>Sheet 1 of 1</p>	ATTORNEY DOCKET NO.	SERIAL NO.
	29250-001091/US	NEW
	APPLICANT	
	Matthias MOERZ	
	FILING DATE	GROUP
	February 24, 2004	Unknown

U.S. PATENT DOCUMENTS						
Ref. Desig.	Examiner's Initials	Document Number	Date	Name	Class/ Subclass	(If appropriate) Filing Date

FOREIGN PATENT DOCUMENTS							
Ref. Desig.	Examiner's Initials	Document Number	Date	Country	Class/ Subclass	Translation Yes No	

OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.)		
Ref. Desig.	Examiner's Initials	
		F. Lustenberger, M. Helfenstein, H.-A. Loeliger, F. Tarkoy, and G. S. Moschytz, "All-Analog Decoder for a Binary (18,9,5) Tail-Biting Trellis Code," in <i>Proc. of 25th European Solid-State Circuits Conference</i> , Duisburg, Germany, pp. 362-365, Sept. 1999.
		M. Moerz, T. Gabara, R. Yan, and J. Hagenauer, "An Analog 0.25 μ m BiCMOS Tailbiting MAP Decoder," in <i>Proc. IEEE International Solid-State Circuits Conference (ISSCC 2000)</i> , San Francisco, California, pp. 356-357, Feb. 2000.
		C. Winstead, J. Dai, W. J. Kim, S. Little, Y.B., Kim, C. Myers, C. Schlegel, "Analog MAP Decoder For (8,4) Hamming Code In Subthreshold CMOS," in <i>Proc. Advanced Research in VLSI</i> , Salt Lake City, Nevada, pp. 132-147, Mar. 2001.
		V. Gaudet and G. Gulak, "A 13.3Mb/s 0.35 μ m CMOS Analog Turbo Decoder IC With A Configurable Interleaver," in <i>Proc. IEEE International Solid-State Circuits Conference (ISSCC 2003)</i> , San Francisco, California, Feb. 2003.
		M. Moerz, "Analog Sliding Window Decoding," in <i>Proc. Joint Workshop of Communications and Coding</i> , Barolo, Italy, Nov. 2002.
		L.R. Bahl, J. Cocke, F. Jelinek and J. Raviv, "Optimal Decoding of Linear Codes for Minimizing Symbol Error Rate," <i>IEEE Trans. Inform. Theory</i> , vol. IT-20, pp. 284-287, Mar. 1974.
		J. Hagenauer, E. Offer, and L. Papke, "Iterative Decoding of Binary Block and Convolutional Codes," <i>IEEE Trans. Inform. Theory</i> , vol. 42, no. 2, pp. 429-445, Mar. 1996.
		J. B. Anderson and S. M. Hladik, "Tailbiting MAP Decoders," <i>IEEE Journal on Selected Areas in Communications</i> , vol. 16, no. 2, pp. 297-302, Feb. 1998.
		A. J. Viterbi, "An Intuitive Justification and a Simplified Version of the MAP Decoder for Convolutional Codes," <i>IEEE Journal on Selected Areas in Communications</i> , vol. 16, no. 2, pp. 260-264, Feb. 1998.
		S. Benedetto, D. Divsalar, G. Montorsi, and F. Pollara, "Soft-Output Decoding Algorithms for Continuous Decoding of Parallel Concatenated Convolutional Codes," in <i>Proc. ICC 96</i> , vol. 1, pp. 112-117, 1996.
		European Telecommunications Standards Institute, "Universal Mobile Telecommunications System (UMTS): Multiplexing and Channel Coding (FDD)," <i>SGPP TS 125.212 version 3.4.0</i> , pp. 14-20, Sep. 2000.

Examiner:	Date Considered:
-----------	------------------

EXAMINER: Please initial if citation considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.